

In the Drawings:

40 Attached is a set of proposed corrected drawings in which labels are added to one or more blocks in the block diagrams. In particular, labels are added to diagrammatic blocks of 30, 40, of Fig. 1; blocks 14, 16, 120 1200 of Fig. 2 and block 120 of Fig. 3C.

45 In the Claims:

In claim 4 line 2, delete "the" and insert --a--.

REMARKS

Reconsideration in allowance are respectfully requested in view of the above
50 amendment and the following remarks. In the office action mailed June 22, 1998, the examiner requested copies of references not included in the prior IDS. Copies of those references are included with this amendment along with a supplemental PTO-1449 form. The action also required an abstract and that abstract has been added by amendment. The action also required correction of the informal drawings which are also enclosed. Claim
55 4 was objected to as indefinite and has been amended to render it more definite.

Claims 1-6 and 9-18 were rejected under 35 U.S.C. 103 [a] as being unpatentable over Kuzma of record (5,389,965) in view of Paneth et al. of record (5,119,375).
Applicant respectfully traverses the rejection on grounds that there is no statutory basis in the references for rejecting the claimed invention.

60 In order to make a proper rejection for obviousness, the references must contain
all of the elements recited in the claims. If the references fail to show all of the elements,
then the invention can not be obvious.

The cited reference of Kuzma fails to show or suggest a plurality of sequential
data bytes, each set of data bytes comprising of sequence of at least one audio byte and
65 a plurality of video bytes. Kuzma transmits data in accordance with a protocol known
as X.25. That protocol is described in Column 6. Kuzma expressly discloses that in his
invention "three virtual channels are needed-video, audio, and supervisory." Column 6,
lines 24, 25. In Column 7 Kuzma further describes that the X.25 packet includes a
plurality of packets "that contain either video, audio, or supervisory information."
70 [emphasis added] Column 7 lines 13, 14. See also Column 7, lines 23, 24.

Kuzma failed to show or suggest combining audio and video information into a
common frame, in particular a frame that includes at least one byte of audio information
and at least two bytes of video information. That feature of the invention renders it
substantially more efficient than prior art devices such as the one shown in Kuzma. In
75 the Kuzma device, it is possible that a transmitted audio frame or a transmitted video
frame may contain no new information. As such, when that frame is transmitted, a
valuable time is lost in transmitting available information. So, while the speaker is silent,
the transmission spectrum occupied by the audio signals is virtually useless in the Kuzma
device. Likewise, when the video signal has little or no new information to transmit, but
80 the speaker is talking, the transmission of the data deficient video signal slows down and
interferes with the bandwidth available for audio. In contrast, the claimed invention
always has some audio and some video data in each frame that is transmitted. This is
particularly important given the application of the invention to mobile, battlefield

situations. In those situations, both time and information are of the essence and wasting

85 available bandwidth on transmitting no data is unacceptable to the user.

Kuzma has two separate channels for separately transmitting audio and video information. The audio transmission is described in Column 5, lines 27-41. Note that the audio information is transmitted at a data rate of 6.8 KB/S. The remainder of the Kuzma patent describes the transmission of video information. See Column 5, line 48
90 where Kuzma disclosed that video information is transmitted at the rate of 19.2 KB/S. Kuzma fails to show or suggest transmitting frames of data where each frame of data includes audio and video bytes. Accordingly, Kuzma is wholly inadequate as a reference since it does show a claimed element of the invention.

Applicant also traverses the rejection of claim 6. Claim 6 calls for "means for
95 synchronizing the frames to the data rate of the RF link." It is asserted in the office action that Kuzma shows synchronization. However, a review of the Kuzma reference did not identify any disclosure calling for synchronization of frames to the data rate of the RF link. Indeed, Kuzma cannot show such synchronization to an RF link because Kuzma does not transmit over radio frequency.

100 The missing synchronization is not supplied by the Paneth reference. That reference is concerned only with an RF telephone system. RF telephone are asynchronous systems. The failure of either reference to show or suggest synchronizing frames to the data rate of an RF link demonstrates that the invention of claim 6 is patentable over the art of record.

105 Applicant also traverses the rejection of claim 19. That claim calls for a narrow band video codec that includes three digital signal processors and means for emulating a disk access system. One of the distinctive features of the invention is its construction

from standard, off-the-shelf parts such as digital signal processors. No special circuitry is needed or required. Another feature of the invention is it's lightweight and battery
110 power. Although those features are not included in claim 19, they are nevertheless features to be considered in evaluating application of the references to claim 19.


A review of Kuzma shows that there is only one processor, a host processor 160. That processor is not identified as a digital signal processor. Standard, off-the-shelf digital signal processors are designed to work with a hard disk drive. In the Kuzma
115 device there is no hard disk drive and no disclosure that the host processor has a hard disk drive emulator.

Since Kuzma does not have either a hard disk or a hard disk emulator, there is no suggestion from the references to combine the emulator of Peters with Kuzma. Indeed, such a combination would appear to be solving a problem that does not exist. The
120 rejection offers no rationale why one skilled in the art would add a hard disk emulator to the Kuzma system. Absent a suggestion in the references themselves to both select and combine the respective components, the references are not available to reject the invention as obvious.

Applicants respectfully acknowledge the indicated allowability of claims 29 and
125 30. It is believed that the foregoing remarks demonstrate that the allowable subject matter of the invention includes significantly more subject matter than that found in those two claims. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,

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